Commonwealth of Kentucky
Environmental and Public Protection Cabinet
Department for Environmental Protection
Division for Air Quality
803 Schenkel Lane
Frankfort, Kentucky 40601
(502) 573-3382

Draft

AIR QUALITY PERMIT

Issued under 401 KAR 52:020

Permittee Name:	**J.L. French Corporation**
Mailing Address:	**20 Prestwick Drive, Glasgow, KY 42141**
Source Name:	**J.L. French Corporation**
Mailing Address:	**20 Prestwick Drive** **Glasgow, KY 42141**
Source Location:	**20 Prestwick Drive in Glasgow, KY**
Permit:	**V-08-026**
Agency Interest:	**78**
Activity:	**APE20050002**
Review Type:	**Title V, Construction / Operating**
Source ID:	**21-009-00065**
Regional Office:	**Bowling Green Regional Office** **1508 Westen Avenue** **Bowling Green, KY 42104** **(270) 746-7475**
County:	**Barren**
Application Complete Date:	**June 12, 2008**
Issuance Date:	
Revision Date:	
Expiration Date:	

John S. Lyons, Director
Division for Air Quality

Revised 05/07/07

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	Permit type	**Log or Activity#**	**Complete Date**	**Issuance Date**	**Summary of Action**
V-00-038	**Initial Issuance**	**53149**	**9/30/00**	**12/19/00**	
V-00-038 (Revision 1)	**Minor Modification**	**55554**	**3/15/03**	**7/25/03**	**Emission limitation change**
V-07-003	**Renewal**	**APE20050002**	**08/19/2005**	**TBD**	**Permit Renewal**

SECTION A - PERMIT AUTHORIZATION

Pursuant to a duly submitted application the Kentucky Division for Air Quality hereby authorizes the operation of the equipment described herein in accordance with the terms and conditions of this permit. This permit has been issued under the provisions of Kentucky Revised Statutes Chapter 224 and regulations promulgated pursuant thereto.

The permittee shall not construct, reconstruct, or modify any affected facilities without first submitting a complete application and receiving a permit for the planned activity from the permitting authority, except as provided in this permit or in 401 KAR 52:020, Title V Permits.

Issuance of this permit does not relieve the permittee from the responsibility of obtaining any other permits, licenses, or approvals required by this Cabinet or any other federal, state, or local agency.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS

001 (P01) Rotary Drum Preheater

Description:	Rotary drum preheater processing uncoated/unpainted aluminum that is both oily and oil-free
Maximum Capacity:	8 tons/hr of oil-free aluminum and 5 tons/hr of oily aluminum
Fuel:	Natural gas
Fuel Usage:	13.0 million British thermal units per hour (mmBtu/hr)
Construction Date:	June 28, 2000
Control Device:	Lime injected baghouse, with particulate control efficiency estimated at 99%. Operation of the baghouse during preheater operation is voluntary.
Construction Date:	June 5, 2000

APPLICABLE REGULATIONS:

401 KAR 59:010 - New process operations. Applicable with respect to particulate emissions to each affected facility commenced on or after July 2, 1975.

Regulations Not Applicable:

401 KAR 63:002, which incorporates by reference *40 CFR 63 Subpart RRR, National Emission Standards for Hazardous Air Pollutants for Secondary Aluminum Production*, the requirements of this rule do not apply to the rotary drum dryer since it is operated in a low temperature mode (at or less than 350°F) solely to remove moisture from aluminum scrap. When operating in this low temperature mode the unit is used only to remove moisture from aluminum scrap and it is considered as a preheater and not a thermal chip dryer, as specified at 40 CFR 63.1503.

1. **Operating Limitations:**

   The permittee shall comply with the following for EP 01:

   a. The rotary drum preheater shall process only unpainted/uncoated aluminum chips; and
   b. The rotary drum preheater shall be maintained at an operating temperature that does not exceed 350°F.

   Compliance Demonstration Method:

   Refer to **4. Specific Monitoring Requirements**, **5. Specific Recordkeeping Requirements,** and **6. Specific Reporting Requirements** below.

2. **Emission Limitations:**

   a. Pursuant to 401 KAR 59:010 Section 3(2), emissions of particulate matter (PM) from the respective control device or stack at EP 01 shall not exceed the allowable limit calculated by the following formula:

      For process rates up to 60,000 lb/hr, $E = 3.59 \times P^{0.62}$

      Where E = rate of emissions in lb/hr
      P = process weight rate in tons/hour

For processing rates of 1000 lb/hr or less, the emissions of particulate matter shall not exceed 2.34 lb/hr.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

b. Pursuant to 401 KAR 59:010 Section 3(1), visible emissions from the respective control device or stack at EP 01 shall not equal or exceed 20% opacity

Compliance Demonstration Method:

a. The permittee shall perform a qualitative visual observation of the opacity of emissions from the emission points listed above at least once per operating week and maintain a log of the observations. If visible emissions from the vents are seen (not including condensed water vapor within the plume), then the opacity shall be determined by Reference Method 9. If emissions are in excess of the applicable opacity limit, then an inspection shall be initiated of control equipment for all necessary repairs.
b. To demonstrate compliance with paragraph **a.** above, the permittee shall monitor the amounts and types of process weights added to the emission unit. The process weight shall be determined by dividing the tons of material added to the emission unit in a calendar month divided by the total hours the unit operated that month. Average particulate emissions shall be calculated as follows:

$$PE = (PW \times PEF) \times (1\text{-Control Efficiency})$$

Where PE = Particulate emissions in lbs/hr, PW = average process weight in tons/hr, and PEF = particulate emission factor (lbs/ton of process weight, based on AP-42 or equivalent, the most recent stack test, material balance or other factor approved by the Division)

3. Testing Requirements:

Pursuant to 401 KAR 59:005 Section 2(2) and 401 KAR 50:045, Section 1, performance testing using the Reference Methods specified in 401 KAR 50:015 shall be conducted as required by the division.

4. Specific Monitoring Requirements:

a. The permittee shall monitor the amounts and types of process weight added to rotary drum preheater and the hours of unit operation.
b. A qualitative visual observation of the opacity of emissions shall be performed from the emission point stack on a weekly basis and a log of the observations maintained. If visible emissions from the stack is seen (not including condensed water vapor within the plume), then the opacity shall be determined by Reference Method 9. If emissions are in excess of the applicable opacity limit, then an inspection shall be initiated of control equipment for all necessary repairs.
c. The permittee shall install, calibrate, maintain and operate a device for continuously monitoring the operating temperature of the rotary drum preheater.

5. Specific Recordkeeping Requirements:

The permittee shall keep the following records:

a. The total monthly processing rate.
b. The hours per month of the operation of the unit.
c. A log shall be kept of all emission observations. Notation in the monthly log shall be made of the following:

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

i. Weekly observations of visible emissions during operation of associated equipment.
ii. Observations of visible emissions during all periods of control equipment malfunction.
iii. Reference Method 9 test results as necessary.

d. The rotary drum preheater operating temperature in accordance with paragraph 4.c above.
e. The permittee shall record the occurrence, duration, cause and any corrective action taken for each incident when the rotary drum preheater is in operation and the operating temperature is above the limit specified in **1. Operating Limitations** above.

6. Specific Reporting Requirements:

The permittee shall report any exceedances or excursions from emission limitations or operating limitations specified in this section in accordance with **Section F**.

7. Specific Control Equipment Operating Conditions:

The permittee shall comply with the lime injection baghouse requirements of Section B, Group Requirements, for the emission units listed therein. There are no specific baghouse operating conditions applicable while operating the rotary drum preheater.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

004 (D01) Dross Cooling

Description:	Reduces the dross temperature after skimming from the melt/hold furnaces by placing hot dross onto pads located in the production building's alloy department
Maximum Capacity:	0.4 tons/hr
Control Device:	Production Building Capture, estimated particulate control efficiency 70%
Construction:	June 5, 2000

APPLICABLE REGULATIONS:
401 KAR 63:010, Fugitive emissions. Applicable to EP 04 with respect to fugitive emissions.

1. **Operating Limitations:**
   None

2. **Emission Limitations:**
   a. Pursuant to 401 KAR 63:010, Section 3(2), the permittee shall not cause or permit the discharge of visible fugitive dust emissions beyond the lot line of the property on which the emissions originate.
   b. Pursuant to 401 KAR 63:010, Section 3(3), when dust, fumes, gases, mist, odorous matter, vapors, or any combination thereof escape from a building or equipment in such a manner and amount as to cause a nuisance or to violate any administrative regulation, the secretary may order that the building or equipment in which processing, handling and storage are done be tightly closed an ventilated in such a way that all air and gases and air or gas-borne material leaving the building or equipment are treated by removal or destruction of air contaminants before discharge to the open air.

   Compliance Demonstration Method:
   a. In order to demonstrate compliance with 401 KAR 63:010, the affected facility listed above shall be controlled with wet suppression, enclosures, and/or dust collection equipment.
   b. Refer to **4. Specific Monitoring Requirements**, **5. Specific Recordkeeping Requirements,** and **6. Specific Reporting Requirements** below.

3. **Testing Requirements:**
   None

4. **Specific Monitoring Requirements:**
   Qualitative visual observations shall be made daily during dross cooling to determine if fugitive dust from the dross cooling area is being generated in such an amount or manner as to cause a nuisance or to cross the property line. If such a condition develops, measures shall be taken to suppress fugitive dust emissions so as to comply with the applicable requirements of 401 KAR 63:010 as listed above.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

5. Specific Recordkeeping Requirements:

The permittee shall record the occurrence, duration, cause and any corrective action taken for each incident when EP 04 is in operation and fugitive emissions are being generated in such an amount or manner as to cause a nuisance or to cross the property line.

6. Specific Reporting Requirements:

The permittee shall report any exceedances or excursions from emission limitations or operating limitations in accordance with **Section F**.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

GROUP REQUIREMENTS

002 (IF01-02) **Induction furnaces – Two (2)**

Description: Electric furnaces that melt solid aluminum billets and varieties of scrap chips processed by the dryer (EP 01). The furnaces are classified as group 2 furnaces, i.e., furnaces of any design that melt, hold, or process only clean charge and that perform no fluxing or perform fluxing using only nonreactive, non-HAP-containing/non-HAP-generating gases or agents.

Maximum Capacity: 3 tons/hr, each

Construction Date: June 26, 2000

Control Device: Lime injected baghouse, with particulate control efficiency estimated at 99% and hydrogen chloride (HCl) and dioxin/furan (D/F) efficiencies estimated at 90%

Construction: June 5, 2000

003 (RMF01-03) **Reverberatory Melt Furnaces - Three (3)**

Description: Custom built natural gas fired reverberatory melting furnaces; chlorine gas fluxing performed continuously to remove impurities; classified as group 1 furnaces. Chlorine injection/fluxing is performed in the sidewell s to remove magnesium and other impurities which rise to the top of sidewell of the furnace and are manually skimmed off as dross. The reactive fluxing takes place only in the sidewells of these furnaces and the level of molten aluminum is maintained above the archway between the sidewells and hearth.

Maximum Capacity: 6.5 tons/hr of aluminum feed, each; 200 lb/hr chlorine flux, each; 500 lb/hr powder flux, each; and 1500 lb/hr alloy materials, each

Fuel: Natural gas

Fuel Usage: 16.0 mmBtu/hr, each

Furnace	Construction Date
#1	April 24, 2000
#2	June 12, 2000
#3	To be constructed in 2008

Control Device: Lime injected baghouse, with particulate control efficiency estimated at 99% and hydrogen chloride (HCl) and dioxin/furan (D/F) efficiencies estimated at 90%

Construction Date: June 5, 2000

Secondary Control Device: Ammonia injection in the furnace hood for control of HCl and D/F

Construction: June 5, 2000

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

005 (HF01-08) Holding Furnaces 1-8 - Eight (8)
Description: Electric custom built holding furnaces; classified as group 2 furnaces; fluxing using nonreactive, non-HAP-containing/non-HAP-generating gas.
Maximum Capacity: 1500 lb/hr/each molten aluminum, 1 lb/hr/each of flux
Maximum Throughput: 6,750 tons/yr aluminum, 8760 lb/yr flux
Construction: June 5, 2000

008 (05-12) Holding furnaces 9-16 - Eight (8) furnaces
009 (13-14) Holding furnaces 17-18 - Two (2) furnaces
010 (15) Holding furnace 19 - One (1) furnace

Description: Continuously operated electric holding furnaces; classified as group 2 furnaces; fluxing using nonreactive, non-HAP-containing/non-HAP-generating gas.
Maximum Capacity: 2500 lb/hr/each molten aluminum, 1 lb/hr/each of flux

Furnace	Construction Date
#9 - #14	2000
#15	2006
#16	2007
#17	To be constructed in 2008
#18	To be constructed in 2009
#19	To be constructed in 2010

APPLICABLE REGULATIONS:

401 KAR 59:010 - New process operations. Applicable with respect to particulate emissions and opacity to each affected facility commenced on or after July 2, 1975. This includes EP 02, 03, 05, 08, 09 and 10.

401 KAR 63:002, which incorporates by reference *40 CFR 63 Subpart RRR, National Emission Standards for Hazardous Air Pollutants for Secondary Aluminum Production*, applies to secondary aluminum production facilities. Since reactive fluxing takes place only in the sidewells of the reverberatory furnaces and the level of molten aluminum is maintained above the arch way between the sidewells and hearth, the hearth/combustion chamber and side door are not subject to the emission limits of 40 CFR 63 Subpart RRR, pursuant to 40 CFR 63.1505(i)(7).

1. **Operating Limitations:**
   a. Pursuant to 40 CFR 63.1506(b), the permittee must provide and maintain easily visible labels posted at each **group 1 furnace** and **group 2 furnace** that identifies the applicable emission limits and means of compliance, including:
      i. The type of affected source or emission unit (e.g. group 1 furnace, group 2 furnace).
      ii. The applicable operational standard(s) and control method(s) (work practice or control device). This includes, but is not limited to, the type of charge to be used for a furnace (e.g., clean scrap only, all scrap, etc.), flux materials and addition practices, and the applicable operating parameter ranges and requirements as incorporated in the OM&M plan.
   b. Pursuant to 40 CFR 63.1506(c), for each **group 1 furnace** the permittee must:

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

i. Design and install a system for the capture and collection of emissions to meet the engineering standards for minimum exhaust rates as published by the American Conference of Governmental Industrial Hygienists in chapters 3 and 5 of "Industrial Ventilation: A Manual of Recommended Practice" (incorporated by reference in 40 CFR 63.1502);
ii. Vent captured emissions through a closed system, except that dilution air may be added to emission streams for the purpose of controlling temperature at the inlet to a fabric filter; and
iii. Operate each capture/collection system according to the procedures and requirements in the OM&M plan.

c. Pursuant to 40 CFR 63.1506(d), for each **group 1 furnace** the permittee must:
   i. Except as provided in paragraph iii. below, install and operate a device that measures and records or otherwise determine the weight of feed/charge (or throughput) for each operating cycle or time period used in the performance test; and
   ii. Operate each weight measurement system or other weight determination procedure in accordance with the OM&M plan.
   iii. The permittee may chose to measure and record aluminum production weight from each **group 1 furnace**, rather than feed/charge weight to each affected source or emission unit, provided that:
      A. The aluminum production weight, rather than feed/charge weight is measured and recorded for all emission units within a SAPU; and
      B. All calculations to demonstrate compliance with the emission limits for SAPUs are based on aluminum production weight rather than feed/charge weight.

d. Pursuant to 40 CFR 63.1506(m), for each **group 1 furnace** with emissions controlled by a lime-injected fabric filter, the permittee must:
   i. If a bag leak detection system is used to meet the monitoring requirements in 40 CFR 63.1510, the owner or operator must:
      A. Initiate corrective action within 1 hour of a bag leak detection system alarm
      B. Complete the corrective action procedures in accordance with the OM&M plan.
      C. Operate each fabric filter system such that the bag leak detection system does not sound more than 5 percent of the operating time during a 6-month block reporting period. In calculating this operating time fraction, if inspection of the fabric filter demonstrates that no corrective action is required, no alarm time is counted. If corrective action is required, each alarm shall be counted as a minimum of one hour. If the owner or operator takes longer than 1 hour to initiate corrective action, the alarm time shall be counted as the actual amount of time taken by the owner or operator to initiate corrective action. [40 CFR 63.1506(m)(1)]
   ii. Maintain the 3-hour block average inlet temperature for each fabric filter at or below the average temperature established during the performance test, plus 14°C (plus 25°F). [40 CFR 63.1506(m)(3)]
   iii. For a continuous lime injection system, maintain free-flowing lime in the hopper to the feed device at all times and maintain the lime feeder setting at the same level established during the performance test. [40 CFR 63.1506(m)(4)]
   iv. Maintain the total reactive chlorine flux injection rate for each operating cycle or time period used in the performance test at or below the average rate established during the performance test. [40 CFR 63.1506(m)(5)]

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

v. Operate each sidewell **group 1 furnace** such that: [40 CFR 63.1506(m)(6)]
   A. The level of molten metal remains above the top of the passage between the sidewell and hearth during reactive flux injection, unless emissions from both the sidewell and the hearth are included in demonstrating compliance with all applicable emission limits.
   B. Reactive flux is added only in the sidewell, unless emissions from both the sidewell and the hearth are included in demonstrating compliance with all applicable emission limits.

e. Pursuant to 40 CFR 63.1506(o)(1), the permittee must operate each **group 2 furnace** using only clean charge as the feedstock (i.e. aluminum scrap known by the owner or operator to be entirely free of paints, coatings, and lubricants)

f. Pursuant to 40 CFR 63.1506(o)(2), the permittee must operate each **group 2 furnace** using no reactive flux.

Compliance Demonstration Method:
Refer to **3. Testing Requirements**, **4. Specific Monitoring Requirements**, **5. Specific Recordkeeping Requirements,** **6. Specific Reporting Requirements,** and **7. Specific Control Equipment Operating Conditions** below.

2. Emission Limitations:

a. Pursuant to 401 KAR 59:010 Section 3(2), emissions of particulate matter (PM) from the respective control device or stack at EP 02, 03, 05, 08, 09 and 10 shall not exceed the allowable limit calculated by the following formula:

For process rates up to 60,000 lb/hr, $E = 3.59 \times P^{0.62}$

Where E = rate of emissions in lb/hr
P = process weight rate in tons/hour

For processing rates of 1000 lb/hr or less, the emissions of particulate matter shall not exceed 2.34 lb/hr.

b. Pursuant to 401 KAR 59:010 Section 3(1), visible emissions from the respective control device or stack at EP 02, 03, 05, 08, 09 and 10 shall not equal or exceed 20% opacity.

c. Pursuant to 40 CFR 63.1505(k)(4) and 40 CFR 63.1505(i) for each of the three identical **group 1 furnaces** (EP 03) at this secondary aluminum production facility which is a major source, the permittee shall not discharge or cause to be discharged to the atmosphere emissions in excess of:
   i. 0.20 kg of PM per Mg (0.40 lb of PM per ton) of feed/charge from a group 1 furnace, that is not a melting/holding furnace processing only clean charge, at a secondary aluminum production facility that is a major source; [40 CFR 63.1505(i)(1)]
   ii. 15 μg of D/F TEQ per Mg (2.1×10^{-4}gr of D/F TEQ per ton) of feed/charge from a group 1 furnace at a secondary aluminum production facility that is a major or area source. This limit does not apply if the furnace processes only clean charge; and [40 CFR 63.1505(i)(3)]

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

iii. 0.20 kg of HCl per Mg (0.40 lb of HCl per ton) of feed/charge or, if the furnace is equipped with an add-on air pollution control device, 10 percent of the uncontrolled HCl emissions, by weight, for a group 1 furnace at a secondary aluminum production facility that is a major source. [40 CFR 63.1505(i)(4)]

d. Pursuant to 40 CFR 63.1505(i)(7), for a sidewell **group 1 furnace** that conducts reactive fluxing (except for cover flux) in the hearth, or that conducts reactive fluxing in the sidewell at times when the level of molten metal falls below the top of the passage between the sidewell and the hearth, the permittee shall comply with the emission limits of paragraphs 2.d.i. through 2.d.iii. above on the basis of the combined emissions from the sidewell and the hearth.

Compliance Demonstration Method:

a. To provide reasonable assurance that the particulate matter emission limitations are being met, the permittee shall monitor the amounts and types of process weight added to each emissions unit. The process weight rate shall be determined by dividing the tons of material added to each emission unit in a calendar month divided by total hours the unit operated that month. The average particulate emissions shall be calculated as follows:

$$Emissions(lb/hr) = \frac{PW * PEF}{OH} * (1 - CE/100)$$

Where: PW = process weight (tons/month)
PEF = particulate emission factor (lb/ton process weight, based on the most recent stack test, material balance or other factor approved by the Division);
OH = unit operating hours during that month, and
CE = control efficiency, if applicable (%)

b. For EP 02, 03, 05, 08, 09 and 10, for compliance with the opacity limits, refer to **4.a. Specific Monitoring Requirements**.

c. For compliance with **Emission Limitations 2.c.**, **d.** and **e.**, refer to **3. Testing Requirements** below.

3. Testing Requirements:

a. Pursuant to 40 CFR 63.1512(d)(1), for **group 1** furnaces that processes scrap other than clean charge materials with emissions controlled by a lime-injected fabric filter, the permittee must conduct performance tests to measure emissions of PM and D/F at the outlet of the control device and emissions of HCl at the outlet (for the emission limit) or the inlet and the outlet (for the percent reduction standard).

b. Pursuant to 40 CFR 63.1512(d)(4), for a sidewell **group 1 furnace** that conducts reactive fluxing (except for cover flux) in the hearth, or that conducts reactive fluxing in the sidewell at times when the level of molten metal falls below the top of the passage between the sidewell and the hearth, the permittee must conduct the performance tests required by paragraph c. above, to measure emissions from both the sidewell and the hearth.

c. Pursuant to 40 CFR 63.1511(e), the permittee shall conduct a performance test every 5 years following the initial performance test.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

The permittee shall notify the Division of the scheduled testing of the painted coated scrap to demonstrate compliance with the Particulate Matter, HCl and D/F emission limitation and submit a test protocol no later than 60 days prior to the test date. The test date shall be scheduled so as to comply with the timeframe specified in 40 CFR 63. 1511(e).

4. Specific Monitoring Requirements:

a. The permittee shall perform a qualitative visible observation of the opacity of emissions from each control device or stack servicing EP 02, 03, 05, 08, 09 and 10 at least once each week, when the emissions unit is in operation and maintain a log of the observation. If visible emissions are seen, then the opacity shall be determined by EPA Reference Method 9 within 30 minutes of observing visible emissions. If Method 9 indicates emissions in excess of the standard, then an inspection shall be initiated for any necessary repairs.

b. The permittee shall monitor the amounts and types of process weight added to each EP 02, 03, 05, 08, 09 and 10 and the hours of operation of each EP 02, 03, 05, 08, 09 and 10.

c. Pursuant to 40 CFR 63.1510(b), for the **group 1 furnaces**, the permittee shall have an approved operation, maintenance and monitoring plan (OM&M) as an attachment to the permit to assure the facility's compliance with Subpart RRR.

d. Pursuant to 40 CFR 63.1510(c), the permittee must inspect the labels for each **group 1 furnace** and **group 2 furnace** at least once per calendar month to confirm that posted labels as required by the operational standard in 40 CFR 63.1506(b) are intact and legible.

e. Pursuant to 40 CFR 63.1510(d)(1), the permittee must install, operate, and maintain a capture/collection system for each **group 1 furnace**.

f. Pursuant to 40 CFR 63.1510(d)(2), for each **group 1 furnace**, the permittee must inspect each capture/collection and closed vent system at least once each calendar year to ensure that each system is operating in accordance with the operating requirements in 40 CFR 63.1506(c) and record the results of each inspection.

g. Pursuant to 40 CFR 63.1510(e), the permittee must, for the each **group 1 furnace**, install, calibrate, operate, and maintain a device to measure and record the total weight of feed/charge to, or the aluminum production from, each affected source or emission unit over the same operating cycle or time period used in the performance test. As an alternative to a measurement device, the permittee may use a procedure acceptable to the applicable permitting authority to determine the total weight of feed/charge or aluminum production to each affected source or emission unit.

   A. The accuracy of the weight measurement device or procedure must be ±1 percent of the weight being measured. The permittee may apply to the permitting agency for approval to use a device of alternative accuracy if the required accuracy cannot be achieved as a result of equipment layout or charging practices. A device of alternative accuracy will not be approved unless the permittee provides assurance through data and information that the affected source will meet the relevant emission standard.

   B. The permittee must verify the calibration of the weight measurement device in accordance with the schedule specified by the manufacturer, or if no calibration schedule is specified, at least once every 6 months.

h. Pursuant to 40 CFR 63.1510(h)(1), the permittee shall, for each **group 1 furnace** using a

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

lime-injected fabric filter, install, calibrate, maintain, and operate a device to continuously monitor and record the temperature of the fabric filter inlet gases consistent with the requirements for continuous monitoring systems in 40 CFR 63 subpart A. The temperature monitoring device shall meet each of these performance and equipment specifications: [40 CFR 63.1510(h)(2)]

i. The monitoring system must record the temperature in 15-minute block averages and calculate and record the average temperature for each 3-hour block period.
ii. The recorder response range must include zero and 1.5 times the average temperature established according to the requirements in 40 CFR 63.1512(n).
iii. The reference method must be a National Institute of Standards and Technology calibrated reference thermocouple-potentiometer system or alternate reference, subject to approval by the Administrator.

i. Pursuant to 40 CFR 63.1510(i)(1)(i), the permittee must, for the continuous lime injection system for the lime-injected fabric filter, verify that lime is always free-flowing by inspecting each feed hopper or silo at least once each 8-hour period and recording the results of each inspection. If lime is found not to be free-flowing during any of the 8-hour periods, the permittee shall increase the frequency of inspections to at least once every 4-hour period for the next 3 days. The permittee may return to inspections at least once every 8 hour period if corrective action results in no further blockages of lime during the 3-day period.
j. Pursuant to 40 CFR 63.1510(i)(2), the permittee must, for the continuous lime injection system for the lime-injected fabric filter, record the lime feeder setting once each day of operation.
k. Pursuant to 40 CFR 63.1510(j)(1), the permittee must, for each **group 1 furnace**, install, calibrate, operate, and maintain a device to continuously measure and record the weight of gaseous or liquid reactive flux injected to each group 1 furnace.
    i. The monitoring system must record the weight for each 15-minute block period, during which reactive fluxing occurs, over the same operating cycle or time period used in the performance test.
    ii. The accuracy of the weight measurement device must be ±1 percent of the weight of the reactive component of the flux being measured. The permittee may apply to the permitting authority for permission to use a weight measurement device of alternative accuracy in cases where the reactive flux flow rates are so low as to make the use of a weight measurement device of ±1 percent impracticable. A device of alternative accuracy will not be approved unless the permittee provides assurance through data and information that the affected source will meet the relevant emission standards.
    iii. The permittee shall verify the calibration of the weight measurement device in accordance with the schedule specified by the manufacturer, or if no calibration schedule is specified, at least once every 6 months.
l. Pursuant to 40 CFR 63.1510(j)(2), the permittee must, for each group 1 furnace, calculate and record the gaseous or liquid reactive flux injection rate (kg/Mg or lb/ton) for each operating cycle or time period used in the performance test using the procedure in 40 CFR 63.1512(o).
m. Pursuant to 40 CFR 63.1510(j)(3), the permittee must, for each **group 1 furnace**, record, for each 15-minute block period during each operating cycle or time period used in the performance test during which reactive fluxing occurs, the time, weight, and type of flux

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

for each addition of gaseous or liquid reactive flux other than chlorine and solid reactive flux.

n. Pursuant to 40 CFR 63.1510(j)(4), the permittee must, for each **group 1 furnace**, calculate and record the total reactive flux injection rate for each operating cycle or time period used in the performance test using the procedure in 40 CFR 63.1512(o).

o. Pursuant to 40 CFR 63.1510(j)(5), the permittee, for each **group 1 furnace** performing reactive fluxing, may apply to the Administrator for approval of an alternative method for monitoring and recording the total reactive flux addition rate based on monitoring the weight or quantity of reactive flux per ton of feed/charge for each operating cycle or time period used in the performance test. An alternative monitoring method will not be approved unless the permittee provides assurance through data and information that the affected source will meet the relevant emission standards on a continuous basis.

p. Pursuant to 40 CFR 63.1510(n), the permittee must, for each sidewell **group 1 furnace**:
   i. Record in an operating log for each charge of a sidewell furnace that the level of molten metal was above the top of the passage between the sidewell and hearth during reactive flux injection, unless the furnace hearth was also equipped with an add-on control device; and
   ii. Submit a certification of compliance with the operational standards in 40 CFR 63.1506(m)(7) for each 6-month reporting period. Each certification shall contain the information in 40 CFR 63.1516(b)(2)(iii).

q. Pursuant to 40 CFR 63.1510(r), for the **group 2 furnaces**, the permittee must:
   i. Record the description of all materials charged to each furnace, including any nonreactive, non-HAP-containing/non-HAP-generating fluxing materials or agents.
   ii. Submit a certification of compliance with the applicable operational standard for charge materials in 40 CFR 63.1506(o) for each 6-month reporting period. Each certification shall contain the information in 40 CFR 63.1516(b)(2)(v).

5. Specific Recordkeeping Requirements:

a. The permittee shall maintain records in accordance with **Specific Monitoring Requirements** **4.a.** and **4.b.**

b. Pursuant to 40 CFR 63.1517(a), as required by 40 CFR 63.10(b), the permittee shall maintain files of all information (including all reports and notifications) required by 40 CFR 63 Subpart A and the records specified in **4. Specific Monitoring Requirements**, as required by Subpart RRR.
   i. The permittee must retain each record for at least 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. The most recent 2 years of records must be retained at the facility. The remaining 3 years of records may be retained off site;
   ii. The permittee may retain records on microfilm, computer disks, magnetic tape, or microfiche; and
   iii. The permittee may report required information on paper or on a labeled computer disk using commonly available and EPA-compatible computer software.

c. Pursuant to 40 CFR 63.1517(b), in addition to the general records required by 40 CFR 63.10(b), the permittee of an affected source must maintain records of:
   i. For each **group 1 furnace**, with emissions controlled by a fabric filter or a lime-injected fabric filter, for the bag leak detection system, the number of total

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

operating hours for the affected source or emission unit during each 6-month reporting period, records of each alarm, the time of the alarm, the time corrective action was initiated and completed, and a brief description of the cause of the alarm and the corrective action(s) taken. [40 CFR 63.1517(b)(1)(i)]

ii. For each **group 1 furnace**, subject to D/F and HCl emission standards with emissions controlled by a lime-injected fabric filter, records of 15-minute block average inlet temperatures for each lime-injected fabric filter, including any period when the 3-hour block average temperature exceeds the compliant operating parameter value +14 °C (+25 °F), with a brief explanation of the cause of the excursion and the corrective action taken. [40 CFR 63.1517(b)(3)]

iii. For each **group 1 furnace**, with emissions controlled by a lime-injected fabric filter, records of inspections at least once every 8-hour period verifying that lime is present in the feeder hopper or silo and flowing, including any inspection where blockage is found, with a brief explanation of the cause of the blockage and the corrective action taken, and records of inspections at least once every 4-hour period for the subsequent 3 days. If flow monitors, pressure drop sensors or load cells are used to verify that lime is present in the hopper and flowing, records of all monitor or sensor output including any event where blockage was found, with a brief explanation of the cause of the blockage and the corrective action taken. [40 CFR 63.1517(b)(4)(i)]

iv. For each **group 1 furnace**, with emissions controlled by a lime-injected fabric filter, records of daily inspections of lime feeder setting, including records of any deviation of the feeder setting from the setting used in the performance test, with a brief explanation of the cause of the deviation and the corrective action taken. [40 CFR 63.1517(b)(4)(ii)]

v. For each **group 1 furnace** (with or without add-on air pollution control devices), records of 15-minute block average weights of gaseous or liquid reactive flux injection, total reactive flux injection rate and calculations (including records of the identity, composition, and weight of each addition of gaseous, liquid or solid reactive flux), including records of any period the rate exceeds the compliant operating parameter value and corrective action taken.. [40 CFR 63.1517(b)(5)]

vi. For each **group 1 furnace**, feed/charge (or throughput) weights for each operating cycle or time period used in the performance test. [40 CFR 63.1517(b)(7)]

vii. Operating logs for each sidewell **group 1 furnace** with add-on air pollution control devices documenting conformance with operating standards for maintaining the level of molten metal above the top of the passage between the sidewell and hearth during reactive flux injection and for adding reactive flux only to the sidewell or a furnace hearth equipped with a control device for PM, HCl, and D/F emissions. [40 CFR 63.1517(b)(10)]

viii. Records of all charge materials and fluxing materials or agents for each **group 2 furnace**. [40 CFR 63.1517(b)(12)]

ix. Records of monthly inspections for proper unit labeling for each **group 1 furnace** and **group 2 furnace** subject to labeling requirements. [40 CFR 63.1517(b)(13)]

x. Records of annual inspections of emission capture/collection and closed vent systems. [40 CFR 63.1517(b)(14)]

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

xi. Records for any approved alternative monitoring or test procedure. [40 CFR 63.1517(b)(15)]

xii. Current copy of all required plans, including any revisions, with records documenting conformance with the applicable plan, including: [40 CFR 63.1517(b)(16)]

(1) Startup, shutdown, and malfunction plan;

(2) OM&M plan; and

(3) Site-specific secondary aluminum processing unit emission plan (if applicable).

d. All records shall be maintained in accordance with **Section F.2**.

6. Specific Reporting Requirements:

a. The permittee shall report any exceedances or excursions from emission limitations or operating limitations in accordance with **Section F**.

b. Startup, shutdown and malfunction plan/report: The permittee must develop a written plan as described in 40 CFR 63.6(e)(3) that contains specific procedures to be followed for operating and maintaining the source during periods of startup, shutdown, and malfunction, and a program of corrective action for malfunctioning process and air pollution control equipment used to comply with the standard. The permittee shall also keep records of each event as required by 40 CFR 63.10(b) and record and report if an action taken during a startup, shutdown, or malfunction is not consistent with the procedures in the plan as described in 40 CFR 63.6(e)(3). In addition to the information required in 40 CFR 63.6(e)(3), the plan must include: [40 CFR 63.1516(a)]

i. Procedures to determine and record the cause of the malfunction and the time the malfunction began and ended; and

ii. Corrective actions to be taken in the event of a malfunction of a process or control device, including procedures for recording the actions taken to correct the malfunction or minimize emissions.

c. Excess emissions/summary report: The permittee must submit semiannual reports according to the requirements in 40 CFR 63.10(e)(3), except, the permittee must submit the semiannual reports within 60 days after the end of each 6-month period instead of within 30 days after the calendar half as specified in 40 CFR 63.10(e)(3)(v). When no deviations of parameters have occurred, the permittee shall submit a report stating that no excess emissions occurred during the reporting period. [40 CFR Part 63.1516(b)]

i. A report must be submitted if any of these conditions occur during a 6-month reporting period:

(1) The corrective action specified in the OM&M plan for a bag leak detection system alarm was not initiated within 1 hour.

(2) An excursion of a compliant process or operating parameter value or range (e.g., lime injection rate or screw feeder setting, total reactive chlorine flux injection rate, fabric filter inlet temperature, definition of acceptable scrap, or other approved operating parameter).

(3) An action taken during a startup, shutdown, or malfunction was not consistent with the procedures in the plan as described in 40 CFR 63.6(e)(3).

(4) An affected source (including an emission unit in a secondary aluminum processing unit) was not operated according to the requirements of Subpart RRR.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

ii. Each report must include this certification for each sidewell **group 1 furnace** with add-on air pollution control devices: "Each furnace was operated such that the level of molten metal remained above the top of the passage between the sidewell and hearth during reactive fluxing, and reactive flux, except for cover flux, was added only to the sidewell or to a furnace hearth equipped with an add-on air pollution control device for PM, HCl, and D/F emissions during this reporting period." [40 CFR 63.1516(b)(2)(iii)]

iii. Each report must include this certification for each **group 2 furnace**: "Only clean charge materials were processed in any group 2 furnace during this reporting period, and no fluxing was performed or all fluxing performed was conducted using only nonreactive, non-HAP-containing/non-HAP-generating fluxing gases or agents, except for cover fluxes, during this reporting period." [40 CFR 63.1516(b)(2)(v)]

iv. The permittee must submit the results of any performance test conducted during the reporting period, including one complete report documenting test methods and procedures, process operation, and monitoring parameter ranges or values for each test method used for a particular type of emission point tested. [40 CFR 63.1516(b)(3)]

d. Annual compliance certifications: For the purpose of annual certifications of compliance required by **Section F.9**, the permittee must certify continuing compliance based upon, but not limited to, the following conditions: [40 CFR Part 63.1516(c)]

i. Any period of excess emissions, as defined in paragraph c.i. above, that occurred during the year were reported as required by Subpart RRR; and

ii. All monitoring, recordkeeping, and reporting requirements were met during the year.

e. Refer to **Section F.5**.

7. Specific Control Equipment Operating Conditions:

a. In accordance with **4. Specific Monitoring Requirements**, the permittee shall, for the continuous lime injection system for the lime-injected fabric filter, verify that lime is always free-flowing by inspecting each feed hopper or silo at least once each 8-hour period and recording the results of each inspection.

b. In accordance with **1. Operating Limitations**, the permittee shall, for the continuous lime injection system, maintain the lime feeder setting at the same of higher level established during the performance test.

c. The fabric filter shall be properly maintained, kept in good operating condition, used in conjunction with the associated processes and operated in accordance with the manufacturer's specifications.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

018 (-) **Aluminum scrap shredder**
Description: Aluminum scrap shredder with fugitive emissions.
Manufacturer: Granutech Saturn Crusher
Maximum Capacity: 90,000 lb/hr
Construction Date: July 22, 2002
Control Device: None

APPLICABLE REGULATIONS:

401 KAR 63:010, *Fugitive Emissions*, is applicable to each affected facility as an apparatus, operation, or road which emits or may emit fugitive emissions provided that the fugitive emissions from such facility are not elsewhere subject to an opacity standard within the administrative regulations of the Division for Air Quality.

401 KAR 63:002, which incorporates by reference *40 CFR 63 Subpart RRR, National Emission Standards for Hazardous Air Pollutants for Secondary Aluminum Production*, applies to secondary aluminum production facilities. Since reactive fluxing takes place only in the sidewells of the reverberatory furnaces and the level of molten aluminum is maintained above the arch way between the sidewells and hearth, the hearth/combustion chamber and side door are not subject to the emission limits of 40 CFR 63 Subpart RRR, pursuant to 40 CFR 63.1505(i)(7).

1. **Operating Limitations:**
   None

2. **Emission Limitations:**
   a. Pursuant to 401 KAR 63:010, Section 3(2), no person shall cause or permit the discharge of visible fugitive dust emissions beyond the lot line of the property on which the emissions originate.

   b. Pursuant to 40 CFR 63.1505, the permittee shall not discharge or cause to be discharged to the atmosphere particulate emissions (PM) in excess of 0.010 grain (gr) per dry standard cubic foot (dscf) from the **aluminum scrap shredder.** [40 CFR 63.1505(b)(1)]

   Compliance Demonstration Method:
   a. See **3. Testing Requirements.**
   b. See **4. Specific Monitoring Requirements.**

3. **Testing Requirements:**
   Pursuant to 401 KAR 59:005 Section 2(2) and 401 KAR 50:045, Section 1, the permittee shall conduct performance testing of the aluminum scrap shredded using Reference Method 5 to demonstrate compliance with the particulate matter emission limit of **2.a Emission Limitations**. Testing shall be performed within five years of the prior valid performance testing and at least once every five (5) years thereafter. *Performance testing was completed July 11, 2007 for the aluminum scrap shredder.*

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

4. Specific Monitoring Requirements:

a. Visual observations shall be made during each shift when the unit is in operation to determine if any fugitive air emissions are being generated in such a manner as to cause a nuisance or to cross the property line. If such a condition develops, a dust suppressant agent shall be applied to minimize the fugitive air emissions so as to comply with the applicable requirements of 401 KAR 63:010 as listed above.

b. The permittee shall monitor and maintain records of the monthly amount of material processed.

c. The permittee shall monitor and maintain records of the monthly hours of operation of the unit.

5. Specific Recordkeeping Requirements:

a. Current copy of all required plans, including any revisions, with records documenting conformance with the applicable plan, including: [40 CFR 63.1517(b)(16)]
   i. Startup, shutdown, and malfunction plan;
   ii. OM&M plan; and
   iii. Site-specific secondary aluminum processing unit emission plan (if applicable).

b. The permittee shall maintain records of the Method 5 test results.

c. The permittee shall maintain records in accordance with **4. Specific Monitoring Requirements.**

d. All records shall be maintained in accordance with **Section F.2**.

6. Specific Reporting Requirements:

a. The permittee shall report any exceedances or excursions from emission limitations or operating limitations in accordance with **Section F**.

b. Startup, shutdown and malfunction plan/report: The permittee must develop a written plan as described in 40 CFR 63.6(e)(3) that contains specific procedures to be followed for operating and maintaining the source during periods of startup, shutdown, and malfunction, and a program of corrective action for malfunctioning process and air pollution control equipment used to comply with the standard. The permittee shall also keep records of each event as required by 40 CFR 63.10(b) and record and report if an action taken during a startup, shutdown, or malfunction is not consistent with the procedures in the plan as described in 40 CFR 63.6(e)(3). In addition to the information required in 40 CFR 63.6(e)(3), the plan must include: [40 CFR 63.1516(a)]
   i. Procedures to determine and record the cause of the malfunction and the time the malfunction began and ended; and
   ii. Corrective actions to be taken in the event of a malfunction of a process or control device, including procedures for recording the actions taken to correct the malfunction or minimize emissions.

c. Excess emissions/summary report: The permittee must submit semiannual reports according to the requirements in 40 CFR 63.10(e)(3), except, the permittee must submit the semiannual reports within 60 days after the end of each 6-month period instead of within 30 days after the calendar half as specified in 40 CFR 63.10(e)(3)(v). When no deviations of parameters have occurred, the permittee shall submit a report stating that no excess emissions occurred during the reporting period. [40 CFR Part 63.1516(b)]

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

i. A report must be submitted if any of these conditions occur during a 6-month reporting period:
   (1) An excursion of a compliant process or operating parameter value or range (e.g., definition of acceptable scrap, or other approved operating parameter).
   (2) An action taken during a startup, shutdown, or malfunction was not consistent with the procedures in the plan as described in 40 CFR 63.6(e)(3).
   (3) An affected source (including an emission unit in a secondary aluminum processing unit) was not operated according to the requirements of Subpart RRR.

ii. The permittee must submit the results of any performance test conducted during the reporting period, including one complete report documenting test methods and procedures, process operation, and monitoring parameter ranges or values for each test method used for a particular type of emission point tested. [40 CFR 63.1516(b)(3)]

d. Annual compliance certifications: For the purpose of annual certifications of compliance required by **Section F.9**, the permittee must certify continuing compliance based upon, but not limited to, the following conditions: [40 CFR Part 63.1516(c)]
   i. Any period of excess emissions, as defined in paragraph c.i. above, that occurred during the year were reported as required by Subpart RRR; and
   ii. All monitoring, recordkeeping, and reporting requirements were met during the year.

e. Refer to **Section F.5**.

7. Specific Control Equipment Operating Conditions:

None

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

DIE CASTING

Description: Molten aluminum is transferred via ladle from a holding furnace to a caster for injection into each die. A solution of water and die lube is sprayed on the open die for cooling and to apply a release agent for easy removal of the die cast part. The die lube consists of approximately 87.2% water, 12.0% petroleum oil, and 0.8% graphite and paraffin wax; and the die lube is diluted with water at about 50:1 before application. The die casting operations consist of the following units:

EP	Die Caster	Description	Maximum Capacity	Construction Date
06	DC01	800 Ton	1500 lb/hr; 2 gal/hr lube	07/31/00
	DC02	800 Ton	1500 lb/hr; 2 gal/hr lube	07/31/00
07	DC03	1200 Ton	2500 lb/hr; 2 gal/hr lube	07/31/00
	DC04	1200 Ton	2500 lb/hr; 2 gal/hr lube	To be constructed in 2008
	DC05	1200 Ton	2500 lb/hr; 2 gal/hr lube	1994
	DC06	1200 Ton	2500 lb/hr; 2 gal/hr lube	1994
	DC07	1200 Ton	2500 lb/hr; 2 gal/hr lube	1994
	DC08	1200 Ton	2500 lb/hr; 2 gal/hr lube	1994
11	19	800 Ton	1500 lb/hr; 2 gal/hr lube	1994
12	20	1600 Ton	2500 lb/hr; 2 gal/hr lube	1994
	21	1600 Ton	2500 lb/hr; 2 gal/hr lube	1994
	22	1600 Ton	2500 lb/hr; 2 gal/hr lube	1994
	23	1600 Ton	2500 lb/hr; 2 gal/hr lube	1994
	24	1600 Ton	2500 lb/hr; 2 gal/hr lube	1994
	25	1600 Ton	2500 lb/hr; 2 gal/hr lube	To be constructed in 2008
	26	1600 Ton	2500 lb/hr; 2 gal/hr lube	To be constructed in 2008
	27	1600 Ton	2500 lb/hr; 2 gal/hr lube	To be constructed in 2008
	28	1600 Ton	2500 lb/hr; 2 gal/hr lube	To be constructed in 2008
13	29	2000 Ton	2500 lb/hr; 2 gal/hr lube	07/31/00
	30	2000 Ton	2500 lb/hr; 2 gal/hr lube	To be constructed in 2008
	31	2000 Ton	2500 lb/hr; 2 gal/hr lube	To be constructed in 2008
	32	2000 Ton	2500 lb/hr; 2 gal/hr lube	To be constructed in 2008

APPLICABLE REGULATIONS:

401 KAR 59:010, *New process operations.* Applicable to each affected facility associated with a process operation which is not subject to another emission standard with respect to particulates in Chapter 59 of 401 KAR commenced on or after July 2, 1975.

1. **Operating Limitations:**
   None

2. **Emission Limitations:**
   a. The visible emissions from the die casters shall not equal or exceed 20% opacity. [401 KAR 59:010, Section 3 (1) (a)]

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

b. Particulate to 401 KAR 59:010, Section 3(2), emissions of particulate matter (PM) from the control device or stack to emission points listed above shall not exceed the allowable limit calculated by the following formula:

For process rates up to 60,000 lb/hr: $E = 3.59P^{0.62}$

Where E = rate of emissions in lb/hr, and
P = process weight in tons/hr

For processing rates of 1000 lb/hr or less, the emissions of particulate matter shall not exceed 2.34 lb/hr.

Compliance Demonstration Method:

a. The permittee shall perform a qualitative visual observation of the opacity of emissions from the emission points listed above at least once per operating week and maintain a log of the observations. If visible emissions from the vents are seen (not including condensed water vapor within the plume), then the opacity shall be determined by Reference Method 9. If emissions are in excess of the applicable opacity limit, then an inspection shall be initiated of control equipment for all necessary repairs.
b. To demonstrate compliance with paragraph **b.** above, the permittee shall monitor the amounts and types of process weights added to each emissions unit. The process weight shall be determined by dividing the tons of material added to each emission unit in a calendar month divided by the total hours the unit operated that month. Average particulate emissions shall be calculated as follows:

PE = (PW x PEF) x (1-Control Efficiency)

Where PE = Particulate emissions in lbs/hr, PW = average process weight in tons/hr, and PEF = particulate emission factor (lbs/ton of process weight, based on the most recent stack test, material balance or other factor approved by the Division)

3. Testing Requirements:

Pursuant to 401 KAR 59:005 Section 2(2) and 401 KAR 50:045, Section 1, performance testing using the Reference Methods specified in 401 KAR 50:015 shall be conducted as required by the division.

4. Specific Monitoring Requirements:

a. The permittee shall monitor the amounts and types of process weight added to each emission point listed above and the hours of operation.
b. The hours per month of the operation of the unit(s).
c. A qualitative visual observation of the opacity of emissions shall be performed from each emission point stack on a weekly basis and a log of the observations maintained. If visible emissions from a stack is seen (not including condensed water vapor within the plume), then the opacity shall be determined by Reference Method 9. If emissions are in excess of the applicable opacity limit, then an inspection shall be initiated of control equipment for all necessary repairs

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

d. The permittee shall monitor and maintain records on the amount and type of die cast lubricants used on a monthly basis. The permittee shall also maintain the material safety data sheet for each lubricant including the weight percent organics contained in the lubricants.

5. Specific Recordkeeping Requirements:

The permittee shall keep the following records:

a. The total monthly processing rate, including lubricant usage rates.
b. The hours per month of the operation of the unit(s).
c. A log shall be kept of all emission observations. Notation in the monthly log shall be made of the following:
   i. Weekly observations of visible emissions during operation of associated equipment.
   ii. Observations of visible emissions during all periods of control equipment malfunction.
   iii. Reference Method 9 test results.
d. The permittee shall record the occurrence, duration, cause and any corrective action taken for each incident when an emission point specified in this section is in operation and the pressure drop reading of the baghouse is outside the range recommended by the manufacturer or established during the most recent performance test.

6. Specific Reporting Requirements:

The permittee shall report any exceedances or excursions from emission limitations or operating limitations specified in this section in accordance with **Section F**.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

ROTOBLASTERS

Description: Batch operated
Maximum Capacity: 5760 square feet/hr, using 57.5 lb/hr of steel shot each
Control Device: Shotblast scrubber - particulate control device for all four rotoblasters
Scrubbing Liquid: Water
Control Efficiency: 99%
Construction Date: 1996

014 (34-35) BCP Rotoblasters – two (2)

Construction Date: 1994

015 (36) BCP Rotoblaster – one (1)

Construction Date: 2006

016 (37) BCP Rotoblaster – one (1)

Construction Date: To be constructed in 2008

APPLICABLE REGULATIONS:

401 KAR 59:010 - New process operations. Applicable with respect to particulate emissions and opacity to each affected facility commenced on or after July 2, 1975 from EP 14, 15 and 16.

1. **Operating Limitations:**
   Refer to **7. Specific Control Equipment Operating Conditions**.

2. **Emission Limitations:**
   a. Pursuant to 401 KAR 59:010, Section 3(2), emissions of particulate matter (PM) from the respective control device or stack at EP 14, 15 and 16 shall not exceed the allowable limit calculated by the following formula:

      For process rates up to 60,000 lb/hr: $E = 3.59P^{0.62}$

      Where E = rate of emissions in lb/hr, and
      P = batch size (tons) divided by the batch cycle time (hours)

      For processing rates of 1000 lb/hr or less, the emissions of particulate matter shall not exceed 2.34 lb/hr.

   b. Pursuant to 401 KAR 59:010, Section 3(1), visible emissions from the respective control device or stack at EP 14, 15 and 16 shall not equal or exceed 20% opacity.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Compliance Demonstration Method:

a. The process weight rate shall be determined by dividing the tons of material added to each emission unit in a calendar month divided by the total hours the unit operated that month. Average particulate emissions shall be calculated as follows:

$$Emissions\,(lb/hr) = \frac{PW \times PEF}{OH} * (1 - CE/100)$$

Where: PW = process weight (tons/month);
PEF = particulate emission factor (lb/ton process weight, based on the most recent stack test, material balance or other factor approved by the Division);
OH = unit operating hours during that month; and
CE = control efficiency (%).

b. For EP 14, 15 and 16, for compliance with the opacity limits, refer to **4.a. Specific Monitoring Requirements**.

3. Testing Requirements:
None

4. Specific Monitoring Requirements:

a. The permittee shall perform a qualitative visible observation of the opacity of emissions each control device or stack servicing EP 14, 15 and 16 at least once each week, when the emission units are in operation and maintain a log of the observation. If visible emissions are seen, then the opacity shall be determined by EPA Reference Method 9 within 30 minutes of observing visible emissions. If Method 9 indicates emissions in excess of the standard, then an inspection shall be initiated for any necessary repairs.
b. The permittee shall monitor the amounts and types of process weight added to each EP 14, 15 and 16 and the hours of operation.
c. The permittee shall install, calibrate and maintain, according to manufacturers' specification, a monitoring device for the measurement of the pressure drop and water flow rate through the scrubber daily.
d. Also refer to **7. Specific Control Equipment Operating Conditions.**

5. Specific Recordkeeping Requirements:

a. The permittee shall maintain records in accordance with **Specific Monitoring Requirements 4.a.** and **4.c.**
b. The permittee shall maintain records of the amounts and types of process weight added to each EP 14, 15 and 16 and the hours of operation.
c. The permittee shall maintain records of preventive maintenance and inspection of the scrubber in accordance with **7. Specific Control Equipment Operating Conditions.**
d. All records shall be maintained in accordance with **Section F.2**.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

6. Specific Reporting Requirements:

a. The permittee shall report any exceedances or excursions from emission limitations or operating limitations in accordance with **Section F**.

b. Refer to **Section F.5**.

7. Specific Control Equipment Operating Conditions:

a. The permittee shall maintain the pressure drop and water flow rate through the scrubber within the range recommended by the manufacturer or established during the most recent stack test.

b. Preventive maintenance shall be performed for the scrubber in accordance with the manufacturers' recommendations.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

017 (GEN 01) Backup generator

Description:	Serves as a backup power source for the induction furnaces in case of power failure
Manufacturer:	Caterpiller model #3508
Construction:	July 31, 2000
Fuel:	Diesel
Maximum Usage:	75 gal/hr

APPLICABLE REGULATIONS:
None

1. **Operating Limitations:**
   The permittee shall not operate the generator more than 720 hours per rolling 12 month period.

2. **Emission Limitations:**
   None

3. **Testing Requirements:**
   None

4. **Specific Monitoring Requirements:**
   The permittee shall monitor and maintain records of the number of hours each month that the backup generator has been operated.

5. **Specific Recordkeeping Requirements:**
   Records shall be maintained of the monthly hours of operation of the generator.

6. **Specific Reporting Requirements:**
   The permittee shall report any exceedances or excursions from emission limitations or operating limitations of this section in accordance with Section F- Monitoring, Recordkeeping, and Reporting Requirements.

SECTION C – INSIGNIFICANT ACTIVITIES

The following listed activities have been determined to be insignificant activities for this source pursuant to 401 KAR 52:020, Section 6. Although these activities are designated as insignificant the permittee must comply with the applicable regulation. Process and emission control equipment at each insignificant activity subject to a general applicable regulation shall be inspected monthly and a qualitative visible emissions evaluation made. Results of the inspections and observations shall be recorded in a log, noting color, duration, density (heavy or light), cause, and any corrective actions taken due to abnormal visible emissions.

Description	Generally Applicable Regulation
FACILITY OPERATIONS	
1. Convenience water heaters	NA
2. Convenience space heaters	NA
3. Natural gas-fired HVAC system	NA
4. Internal combustion engines	NA
5. Fire control equipment	NA
6. 0.25 mile paved haul roads and yard	401 KAR 63:010
7. Equipment maintenance	NA
8. Wisconsin oven, 0.6 mmBtu/hr	401 KAR 59:015
9. Process water treatment	401 KAR 63:010
10. Die lube tanks 1-3 (5000 gal, each)	NA
11. Indoor holding tank (4500 gal)	NA
12. Squeeze cast mixing tank (400 gal)	NA
ALLOY OPERATIONS	
13. Induction furnace conveyor	401 KAR 63:010
14. Furnace pump heaters	
15. Ammonia tank	
16. Cooling towers	401 KAR 63:010

SECTION D - SOURCE EMISSION LIMITATIONS AND TESTING REQUIREMENTS

1. As required by Section 1b of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26; compliance with annual emissions and processing limitations contained in this permit, shall be based on emissions and processing rates for any twelve (12) consecutive months.

2. Hydrogen chloride (HCl), volatile organic compound (VOC), particulate matter (PM) and dioxin/furan (D/F) emissions, measured by applicable reference methods, or an equivalent or alternative method specified in 40 C.F.R. Chapter I, or by a test method specified in the state implementation plan shall not exceed the respective limitations specified herein.

SECTION E - SOURCE CONTROL EQUIPMENT REQUIREMENTS

Pursuant to 401 KAR 50:055, Section 2(5), at all times, including periods of startup, shutdown and malfunction, owners and operators shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Division which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.

SECTION F - MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS

1. Pursuant to Section 1b-IV-1 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26, when continuing compliance is demonstrated by periodic testing or instrumental monitoring, the permittee shall compile records of required monitoring information that include:
   a. Date, place as defined in this permit, and time of sampling or measurements;
   b. Analyses performance dates;
   c. Company or entity that performed analyses;
   d. Analytical techniques or methods used;
   e. Analyses results; and
   f. Operating conditions during time of sampling or measurement.

2. Records of all required monitoring data and support information, including calibrations, maintenance records, and original strip chart recordings, and copies of all reports required by the Division for Air Quality, shall be retained by the permittee for a period of five years and shall be made available for inspection upon request by any duly authorized representative of the Division for Air Quality [Sections 1b-IV-2 and 1a-8 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].

3. In accordance with the requirements of 401 KAR 52:020 Section 3(1)h the permittee shall allow authorized representatives of the Cabinet to perform the following during reasonable times:
   a. Enter upon the premises to inspect any facility, equipment (including air pollution control equipment), practice, or operation;
   b. To access and copy any records required by the permit:
   c. Sample or monitor, at reasonable times, substances or parameters to assure compliance with the permit or any applicable requirements.

   Reasonable times are defined as during all hours of operation, during normal office hours; or during an emergency.

4. No person shall obstruct, hamper, or interfere with any Cabinet employee or authorized representative while in the process of carrying out official duties. Refusal of entry or access may constitute grounds for permit revocation and assessment of civil penalties.

5. Summary reports of any monitoring required by this permit shall be submitted to the Regional Office listed on the front of this permit at least every six (6) months during the life of this permit, unless otherwise stated in this permit. For emission units that were still under construction or which had not commenced operation at the end of the 6-month period covered by the report and are subject to monitoring requirements in this permit, the report shall indicate that no monitoring was performed during the previous six months because the emission unit was not in operation [Sections 1b-V-1 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].

SECTION F - MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS (CONTINUED)

6. The semi-annual reports are due by January 30th and July 30th of each year. All reports shall be certified by a responsible official pursuant to 401 KAR 52:020 Section 23. If continuous emission and opacity monitors are required by regulation or this permit, data shall be reported in accordance with the requirements of 401 KAR 59:005, General Provisions, Section 3(3). All deviations from permit requirements shall be clearly identified in the reports.

7. In accordance with the provisions of 401 KAR 50:055, Section 1 the owner or operator shall notify the Regional Office listed on the front of this permit concerning startups, shutdowns, or malfunctions as follows:
   a. When emissions during any planned shutdowns and ensuing startups will exceed the standards, notification shall be made no later than three (3) days before the planned shutdown, or immediately following the decision to shut down, if the shutdown is due to events which could not have been foreseen three (3) days before the shutdown.
   b. When emissions due to malfunctions, unplanned shutdowns and ensuing startups are or may be in excess of the standards, notification shall be made as promptly as possible by telephone (or other electronic media) and shall be submitted in writing upon request.

8. The owner or operator shall report emission related exceedances from permit requirements including those attributed to upset conditions (other than emission exceedances covered by Section F.7 above) to the Regional Office listed on the front of this permit within 30 days. Deviations from permit requirements, including those previously reported under F.7 above, shall be included in the semiannual report required by F.6 [Sections 1b-V, 3 and 4 of the Cabinet Provisions and Procedures for Issuing Title V Permits incorporated by reference in 401 KAR 52:020, Section 26].

9. Pursuant to 401 KAR 52:020, Permits, Section 21, the permittee shall annually certify compliance with the terms and conditions contained in this permit, by completing and returning a Compliance Certification Form (DEP 7007CC) (or an alternative approved by the regional office) to the Regional Office listed on the front of this permit and the U.S. EPA in accordance with the following requirements:
   a. Identification of the term or condition;
   b. Compliance status of each term or condition of the permit;
   c. Whether compliance was continuous or intermittent;
   d. The method used for determining the compliance status for the source, currently and over the reporting period.
   e. For an emissions unit that was still under construction or which has not commenced operation at the end of the 12-month period covered by the annual compliance certification, the permittee shall indicate that the unit is under construction and that compliance with any applicable requirements will be demonstrated within the timeframes specified in the permit.

SECTION F - MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS (CONTINUED)

f. The certification shall be postmarked by January 30th of each year. Annual compliance certifications shall be mailed to the following addresses:

Division for Air Quality
Bowling Green Regional Office
1508 Westen Avenue
Bowling Green, KY 42104-3356

U.S. EPA Region 4
Air Enforcement Branch
Atlanta Federal Center
61 Forsyth St.
Atlanta, GA 30303-8960

Division for Air Quality
Central Files
803 Schenkel Lane
Frankfort, KY 40601

10. In accordance with 401 KAR 52:020, Section 22, the permittee shall provide the Division with all information necessary to determine its subject emissions within thirty (30) days of the date the KYEIS emission survey is mailed to the permittee.

SECTION G - GENERAL PROVISIONS

1. General Compliance Requirements

   a. The permittee shall comply with all conditions of this permit. Noncompliance shall be a violation of 401 KAR 52:020 Section 3(1)(b) and a violation of Federal Statute 42 USC 7401 through 7671q (the Clean Air Act). Noncompliance with this permit is grounds for enforcement action including but not limited to termination, revocation and reissuance, revision or denial of a permit [Section 1a-3 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020 Section 26].

   b. The filing of a request by the permittee for any permit revision, revocation, reissuance, or termination, or of a notification of a planned change or anticipated noncompliance, shall not stay any permit condition [Section 1a-6 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].

   c. This permit may be revised, revoked, reopened and reissued, or terminated for cause in accordance with 401 KAR 52:020, Section 19. The permit will be reopened for cause and revised accordingly under the following circumstances:
      (1) If additional applicable requirements become applicable to the source and the remaining permit term is three (3) years or longer. In this case, the reopening shall be completed no later than eighteen (18) months after promulgation of the applicable requirement. A reopening shall not be required if compliance with the applicable requirement is not required until after the date on which the permit is due to expire, unless this permit or any of its terms and conditions have been extended pursuant to 401 KAR 52:020, Section 12;
      (2) The Cabinet or the U. S. EPA determines that the permit must be revised or revoked to assure compliance with the applicable requirements;
      (3) The Cabinet or the U. S. EPA determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit;
      (4) New requirements become applicable to a source subject to the Acid Rain Program.

      Proceedings to reopen and reissue a permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of the permit for which cause to reopen exists. Reopenings shall be made as expeditiously as practicable. Reopenings shall not be initiated before a notice of intent to reopen is provided to the source by the Division, at least thirty (30) days in advance of the date the permit is to be reopened, except that the Division may provide a shorter time period in the case of an emergency.

   d. The permittee shall furnish information upon request of the Cabinet to determine if cause exists for modifying, revoking and reissuing, or terminating the permit; or to determine compliance with the conditions of this permit [Sections 1a- 7 and 8 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].

   e. Emission units described in this permit shall demonstrate compliance with applicable requirements if requested by the Division [401 KAR 52:020 Section 3(1)(c)].

SECTION G - GENERAL PROVISIONS (CONTINUED)

f. The permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information to the permitting authority [401 KAR 52:020, Section 7(1)].

g. Any condition or portion of this permit which becomes suspended or is ruled invalid as a result of any legal or other action shall not invalidate any other portion or condition of this permit [Section 1a-14 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].

h. The permittee shall not use as a defense in an enforcement action the contention that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance [Section 1a-4 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].

i. Except for requirements identified in this permit as state-origin requirements, all terms and conditions shall be enforceable by the United States Environmental Protection Agency and citizens. [Section 1a-15-b of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].

j. This permit shall be subject to suspension if the permittee fails to pay all emissions fees within 90 days after the date of notice as specified in 401 KAR 50:038, Section 3(6) [Section 1a-10 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].

k. Nothing in this permit shall alter or affect the liability of the permittee for any violation of applicable requirements prior to or at the time of permit issuance [401 KAR 52:020, Section 11(3)(b)].

l. This permit does not convey property rights or exclusive privileges [Section 1a-9 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].

m. Issuance of this permit does not relieve the permittee from the responsibility of obtaining any other permits, licenses, or approvals required by the Cabinet or any other federal, state, or local agency.

n. Nothing in this permit shall alter or affect the authority of U.S. EPA to obtain information pursuant to Federal Statute 42 USC 7414, Inspections, monitoring, and entry [401 KAR 52:020, Section 11(3)(d)].

o. Nothing in this permit shall alter or affect the authority of U.S. EPA to impose emergency orders pursuant to Federal Statute 42 USC 7603, Emergency orders [401 KAR 52:020, Section 11(3)(a)].

SECTION G - GENERAL PROVISIONS (CONTINUED)

p. This permit consolidates the authority of any previously issued PSD, NSR, or Synthetic Minor source preconstruction permit terms and conditions for various emission units and incorporates all requirements of those existing permits into one single permit for this source.

q. Pursuant to 401 KAR 52:020, Section 11, a permit shield shall not protect the owner or operator from enforcement actions for violating an applicable requirement prior to or at the time of permit issuance. Compliance with the conditions of a permit shall be considered compliance with:
(1) Applicable requirements that are included and specifically identified in the permit and
(2) Non-applicable requirements expressly identified in this permit.

2. Permit Expiration and Reapplication Requirements

a. This permit shall remain in effect for a fixed term of five (5) years following the original date of issue. Permit expiration shall terminate the source's right to operate unless a timely and complete renewal application has been submitted to the Division at least six months prior to the expiration date of the permit. Upon a timely and complete submittal, the authorization to operate within the terms and conditions of this permit, including any permit shield, shall remain in effect beyond the expiration date, until the renewal permit is issued or denied by the Division [401 KAR 52:020, Section 12].

b. The authority to operate granted shall cease to apply if the source fails to submit additional information requested by the Division after the completeness determination has been made on any application, by whatever deadline the Division sets [401 KAR 52:020 Section 8(2)].

3. Permit Revisions

a. A minor permit revision procedure may be used for permit revisions involving the use of economic incentive, marketable permit, emission trading, and other similar approaches, to the extent that these minor permit revision procedures are explicitly provided for in the SIP or in applicable requirements and meet the relevant requirements of 401 KAR 52:020, Section 14(2).

b. This permit is not transferable by the permittee. Future owners and operators shall obtain a new permit from the Division for Air Quality. The new permit may be processed as an administrative amendment if no other change in this permit is necessary, and provided that a written agreement containing a specific date for transfer of permit responsibility coverage and liability between the current and new permittee has been submitted to the permitting authority within ten (10) days following the transfer.

SECTION G - GENERAL PROVISIONS (CONTINUED)

4. Construction, Start-Up, and Initial Compliance Demonstration Requirements

Pursuant to a duly submitted application the Kentucky Division for Air Quality hereby authorizes the construction of the equipment described herein, listed as follows, in accordance with the terms and conditions of this permit:

03 (RMF03) Reverberatory Melt Furnace
Description: Custom built natural gas fired reverberatory melting furnace; chlorine gas fluxing performed continuously to remove impurities; classified as group 1 furnace.
Maximum Capacity: 6.5 tons/hr of aluminum feed; 200 lb/hr chlorine flux; 500 lb/hr powder flux; and 1500 lb/hr alloy materials
Fuel: Natural gas
Fuel Usage: 16.0 mmBtu/hr, each
Construction Date: To be constructed in 2008

Control Device: Lime injected baghouse, with particulate control efficiency estimated at 99% and hydrogen chloride (HCl) and dioxin/furan (D/F) efficiencies estimated at 90%
Construction Date: June 5, 2000 (EXISTING)
Secondary Control Device:
Ammonia injection in the furnace hood for control of HCl and D/F
Construction: June 5, 2000 (EXISTING)

009 (13-14) Holding furnaces 17-18
010 (15) Holding furnace 19
Description: Continuously operated electric holding furnaces; classified as group 2 furnaces; fluxing using nonreactive, non-HAP-containing/non-HAP-generating gas.
Maximum Capacity: 2500 lb/hr/each molten aluminum, 1 lb/hr/each of flux

Furnace	Construction Date
#17	To be constructed in 2008
#18	To be constructed in 2009
#19	To be constructed in 2010

a. Construction of any process and/or air pollution control equipment authorized by this permit shall be conducted and completed only in compliance with the conditions of this permit.

b. Within thirty (30) days following commencement of construction and within fifteen (15) days following start-up and attainment of the maximum production rate specified in the permit application, or within fifteen (15) days following the issuance date of this permit, whichever is later, the permittee shall furnish to the Regional Office listed on the front of this permit in writing, with a copy to the Division's Frankfort Central Office, notification of the following:
(1) The date when construction commenced.

SECTION G - GENERAL PROVISIONS (CONTINUED)

(2) The date of start-up of the affected facilities listed in this permit.
(3) The date when the maximum production rate specified in the permit application was achieved.

c. Pursuant to 401 KAR 52:020, Section 3(2), unless construction is commenced within eighteen (18) months after the permit is issued, or begins but is discontinued for a period of eighteen (18) months or is not completed within a reasonable timeframe then the construction and operating authority granted by this permit for those affected facilities for which construction was not completed shall immediately become invalid. Upon written request, the Cabinet may extend these time periods if the source shows good cause.

d. For those affected facilities for which construction is authorized by this permit, a source shall be allowed to construct with the proposed permit. Operational or final permit approval is not granted by this permit until compliance with the applicable standards specified herein has been demonstrated pursuant to 401 KAR 50:055. If compliance is not demonstrated within the prescribed timeframe provided in 401 KAR 50:055, the source shall operate thereafter only for the purpose of demonstrating compliance, unless otherwise authorized by Section I of this permit or order of the Cabinet.

e. This permit shall allow time for the initial start-up, operation, and compliance demonstration of the affected facilities listed herein. However, within sixty (60) days after achieving the maximum production rate at which the affected facilities will be operated but not later than 180 days after initial start-up of such facilities, the permittee shall conduct a performance demonstration on the affected facilities in accordance with 401 KAR 50:055, General compliance requirements. Testing must also be conducted in accordance with General Provisions G.5 of this permit.

f. Terms and conditions in this permit established pursuant to the construction authority of 401 KAR 51:017 or 401 KAR 51:052 shall not expire.

5. Testing Requirements

a. Pursuant to 401 KAR 50:045 Section 2, a source required to conduct a performance test shall submit a completed Compliance Test Protocol form, DEP form 6028, or a test protocol a source has developed for submission to other regulatory agencies, in a format approved by the cabinet, to the Division's Frankfort Central Office a minimum of sixty (60) days prior to the scheduled test date. Pursuant to 401 KAR 50:045, Section 7, the Division shall be notified of the actual test date at least thirty (30) days prior to the test.

b. Pursuant to 401 KAR 50:045 Section 5, in order to demonstrate that a source is capable of complying with a standard at all times, any required performance test shall be conducted under normal conditions that are representative of the source's operations and create the highest rate of emissions. If [When] the maximum production rate represents a source's highest emissions rate and a performance test is conducted at less than the maximum production rate, a source shall be limited to a production rate of no greater than 110 percent of the average production rate during the performance tests. If and when the facility is capable of operation at the rate specified in the application, the source may

SECTION G - GENERAL PROVISIONS (CONTINUED)

retest to demonstrate compliance at the new production rate. The Division for Air Quality may waive these requirements on a case-by-case basis if the source demonstrates to the Division's satisfaction that the source is in compliance with all applicable requirements.

c. Results of performance test(s) required by the permit shall be submitted to the Division by the source or its representative within forty-five days or sooner if required by an applicable standard, after the completion of the fieldwork.

6. Acid Rain Program Requirements

a. If an applicable requirement of Federal Statute 42 USC 7401 through 7671q (the Clean Air Act) is more stringent than an applicable requirement promulgated pursuant to Federal Statute 42 USC 7651 through 7651o (Title IV of the Act), both provisions shall apply, and both shall be state and federally enforceable.

b. The permittee shall comply with all applicable requirements and conditions of the Acid Rain Permit and the Phase II permit application (including the Phase II NOx compliance plan and averaging plan, if applicable) incorporated into the Title V permit issued for this source. The source shall also comply with all requirements of any revised or future acid rain permit(s) issued to this source.

7. Emergency Provisions

a. Pursuant to 401 KAR 52:020 Section 24(1), an emergency shall constitute an affirmative defense to an action brought for the noncompliance with the technology-based emission limitations if the permittee demonstrates through properly signed contemporaneous operating logs or relevant evidence that:
(1) An emergency occurred and the permittee can identify the cause of the emergency;

(2) The permitted facility was at the time being properly operated;
(3) During an emergency, the permittee took all reasonable steps to minimize levels of emissions that exceeded the emissions standards or other requirements in the permit; and
(4) Pursuant to 401 KAR 52:020, 401 KAR 50:055, and KRS 224.01-400, the permittee notified the Division as promptly as possible and submitted written notice of the emergency to the Division when emission limitations were exceeded due to an emergency. The notice shall include a description of the emergency, steps taken to mitigate emissions, and corrective actions taken.
(5) This requirement does not relieve the source of other local, state or federal notification requirements.

b. Emergency conditions listed in General Condition G.7.a above are in addition to any emergency or upset provision(s) contained in an applicable requirement [401 KAR 52:020, Section 24(3)].

SECTION G - GENERAL PROVISIONS (CONTINUED)

c. In an enforcement proceeding, the permittee seeking to establish the occurrence of an emergency shall have the burden of proof [401 KAR 52:020, Section 24(2)].

8. Ozone Depleting Substances

a. The permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR 82, Subpart F, except as provided for Motor Vehicle Air Conditioners (MVACs) in Subpart B:
   (1) Persons opening appliances for maintenance, service, repair, or disposal shall comply with the required practices contained in 40 CFR 82.156.
   (2) Equipment used during the maintenance, service, repair, or disposal of appliances shall comply with the standards for recycling and recovery equipment contained in 40 CFR 82.158.
   (3) Persons performing maintenance, service, repair, or disposal of appliances shall be certified by an approved technician certification program pursuant to 40 CFR 82.161.
   (4) Persons disposing of small appliances, MVACs, and MVAC-like appliances (as defined at 40 CFR 82.152) shall comply with the recordkeeping requirements pursuant to 40 CFR 82.166
   (5) Persons owning commercial or industrial process refrigeration equipment shall comply with the leak repair requirements pursuant to 40 CFR 82.156.
   (6) Owners/operators of appliances normally containing 50 or more pounds of refrigerant shall keep records of refrigerant purchased and added to such appliances pursuant to 40 CFR 82.166.

b. If the permittee performs service on motor (fleet) vehicle air conditioners containing ozone-depleting substances, the source shall comply with all applicable requirements as specified in 40 CFR 82, Subpart B, *Servicing of Motor Vehicle Air Conditioners*.

9. Risk Management Provisions

a. The permittee shall comply with all applicable requirements of 401 KAR Chapter 68, Chemical Accident Prevention, which incorporates by reference 40 CFR Part 68, Risk Management Plan provisions. If required, the permittee shall comply with the Risk Management Program and submit a Risk Management Plan to:

   RMP Reporting Center
   P.O. Box 1515
   Lanham-Seabrook, MD 20703-1515.

b. If requested, submit additional relevant information to the Division or the U.S. EPA.

SECTION H – ALTERNATE OPERATING SCENARIOS

None

SECTION I - COMPLIANCE SCHEDULE

None